Figure 1

DPDCH   DPCCH   DPDCH   DPCCH

| DATA 1 | TPC | TFI | DATA 2 | PILOT |

| SLOT φ | SLOT 1 | | SLOT i | | SLOT 14 |

ONE FRAME

Figure 2

I-BRANCH | DATA | } DPDCH

Q-BRANCH | PILOT | TFI | FBI | TPC | } DPCCH

| SLOT φ | SLOT 1 | | SLOT i | | SLOT 14 |

Figure 3

Figure 4

Figure 5.

Figure 6

Figure 7
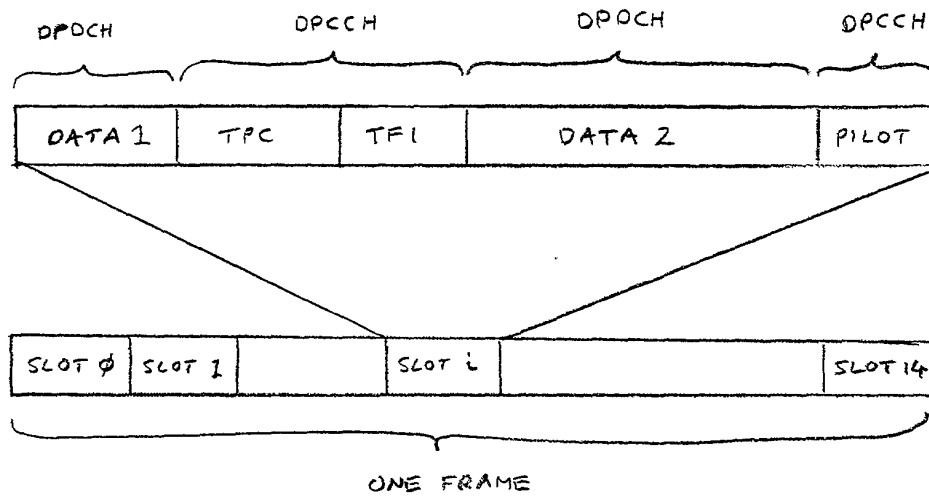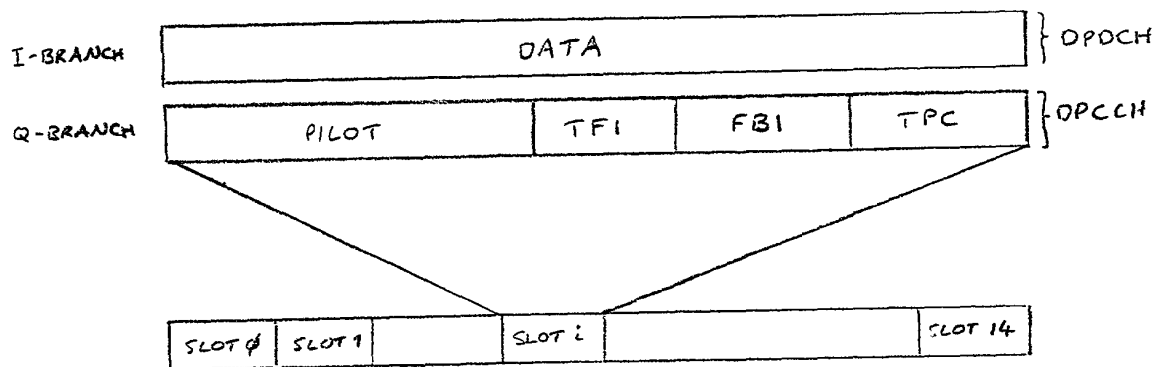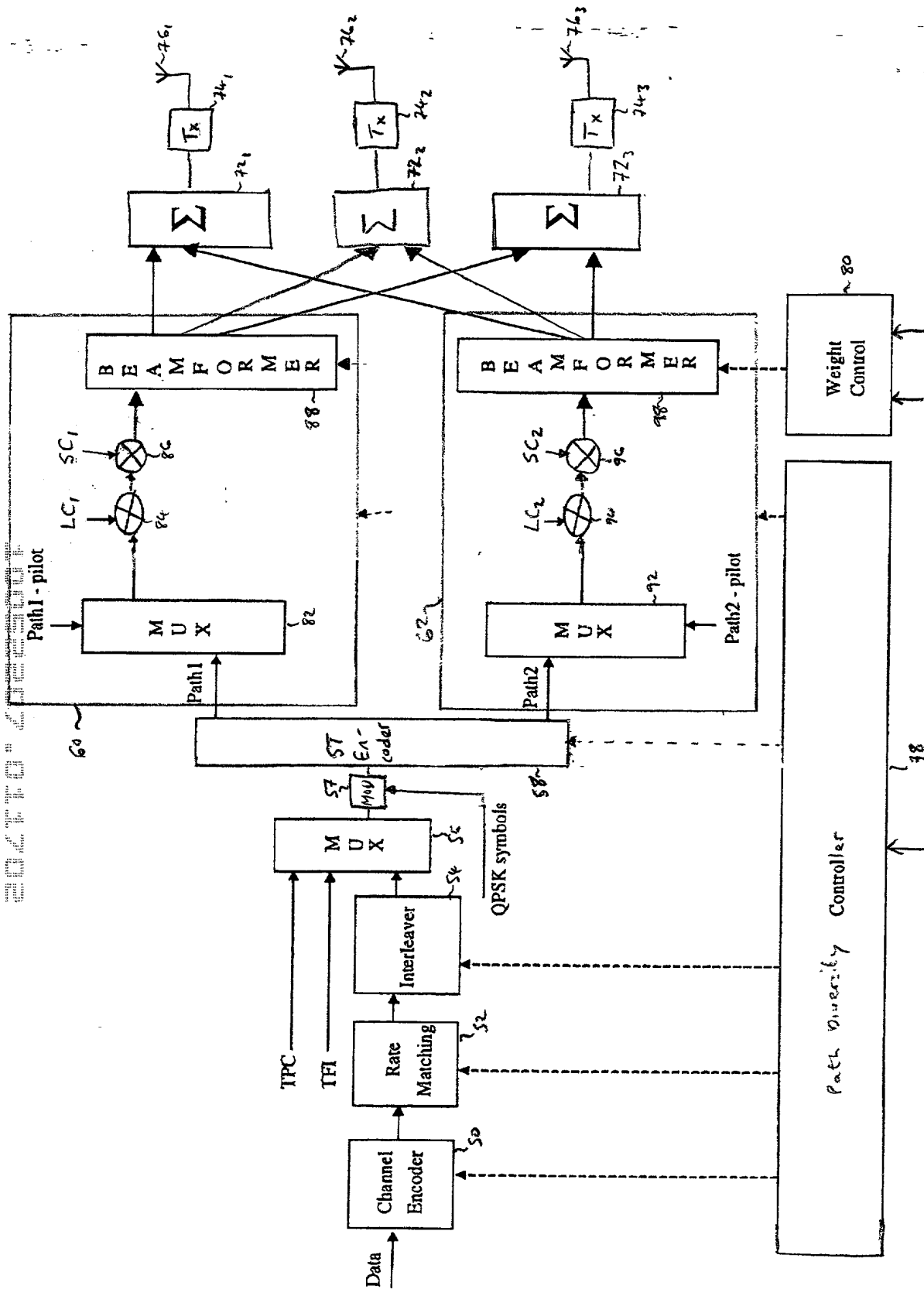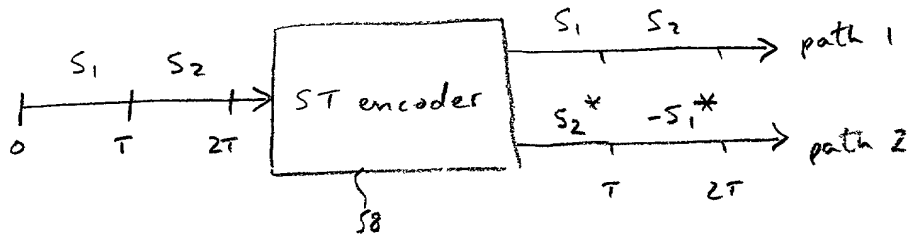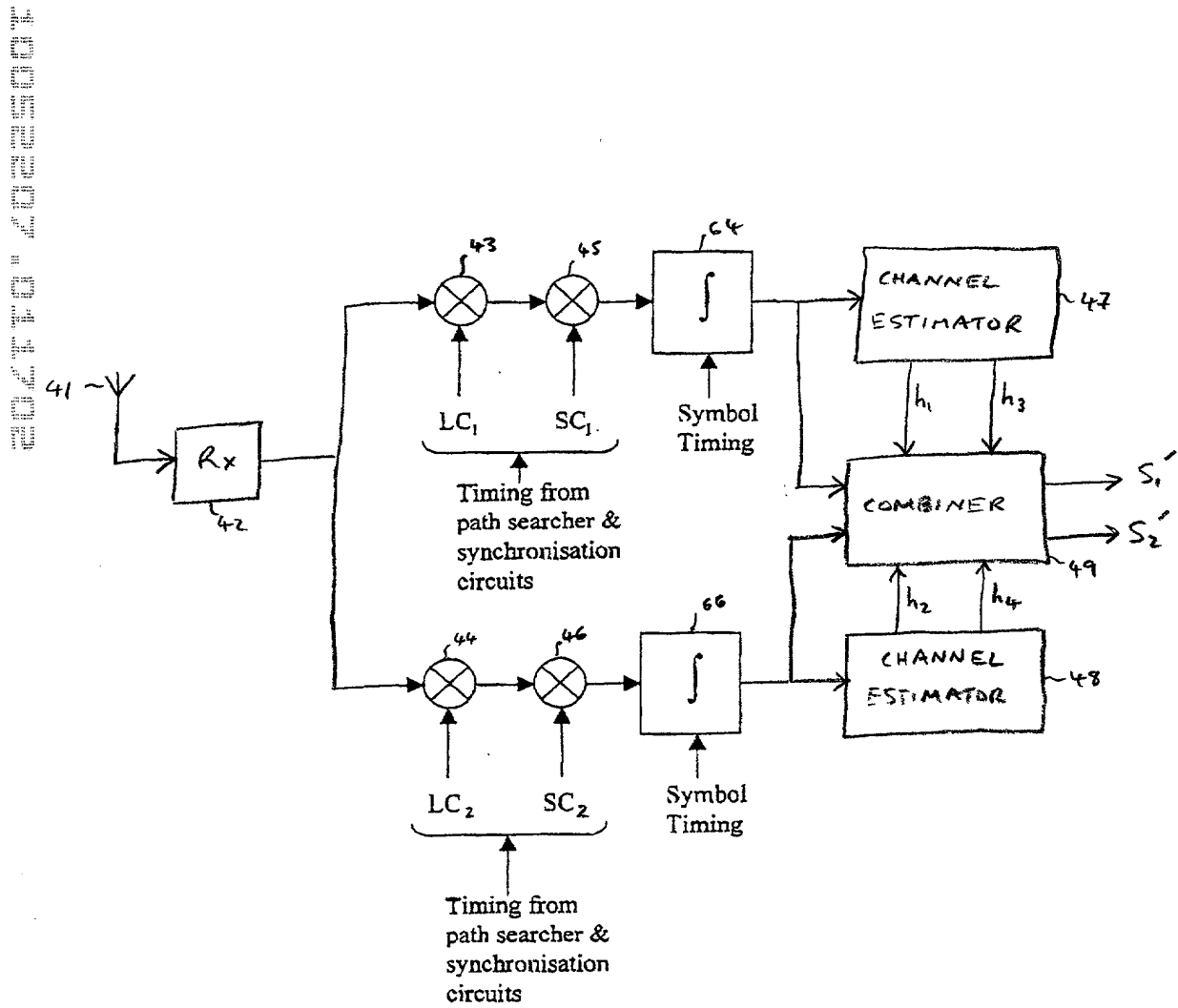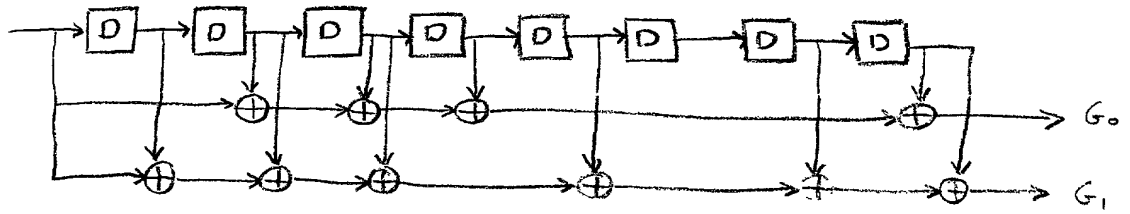
Figure 8

Figure 9

Figure 10

Figure 11

NEW UPLINK PATH? 272
N / Y

PATH POWER ABOVE THRESHOLD? 274
N / Y

ALLOCATE TRANSMISSION PATH 276

ADJUST CONVOLUTION CODING, RATE MATCHING AND INTERLEAVING 278

SET PILOT SIGNAL AND SCRAMBLING CODE 280

TRANSMISSION 282

RECEIVE FEEDBACK SIGNAL 284

PATH QUALITY LESS THAN THRESHOLD? 286
Y → DISABLE/DEALLOCATE TRANSMISSION PATH 288
N

ARE PATHS SUBJECT TO FAST FADING? 290
Y → PERFORM PATH SWITCHING? 292
N

IS THERE A HIGHLY INTERFERING PATH? 294
N
Y

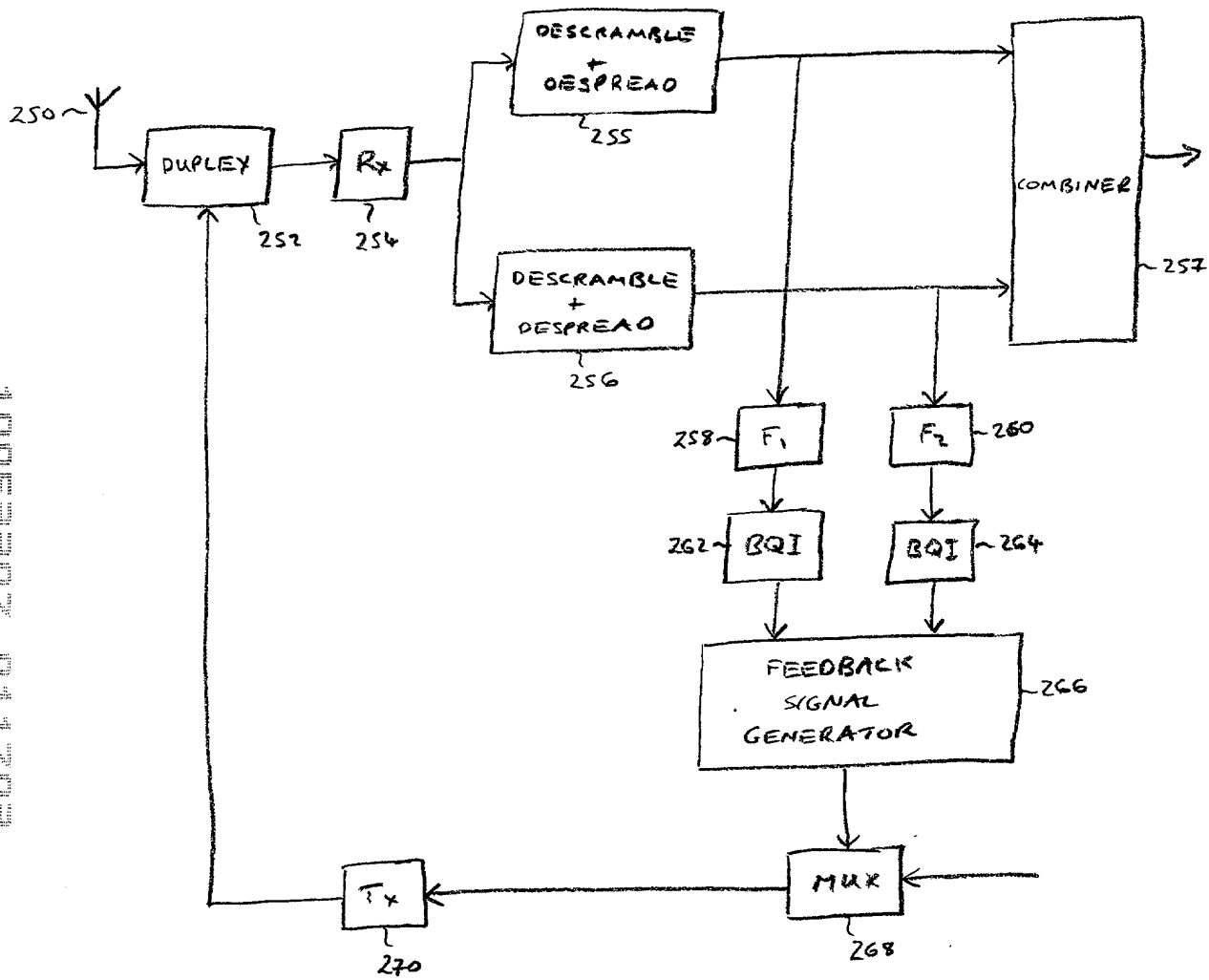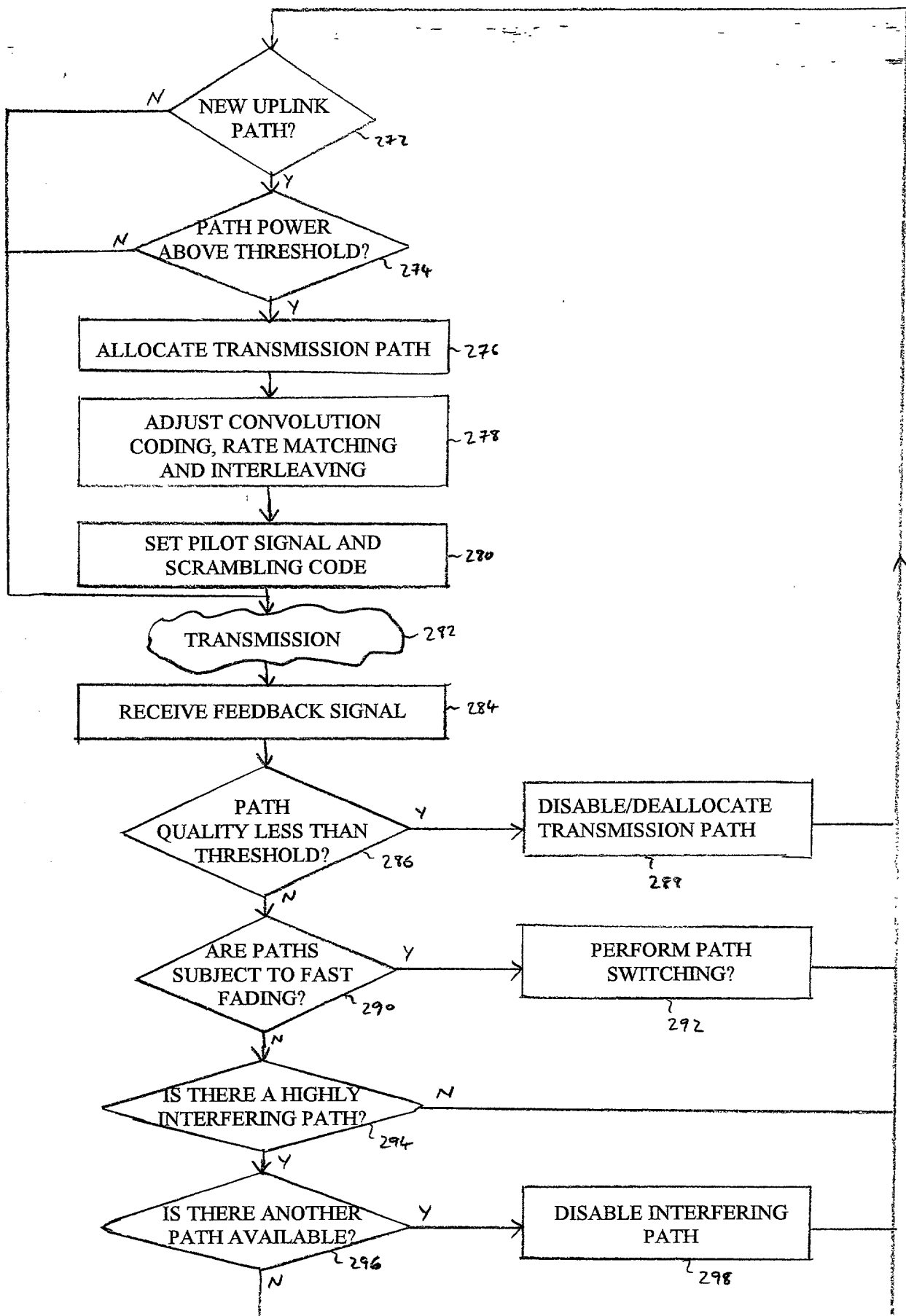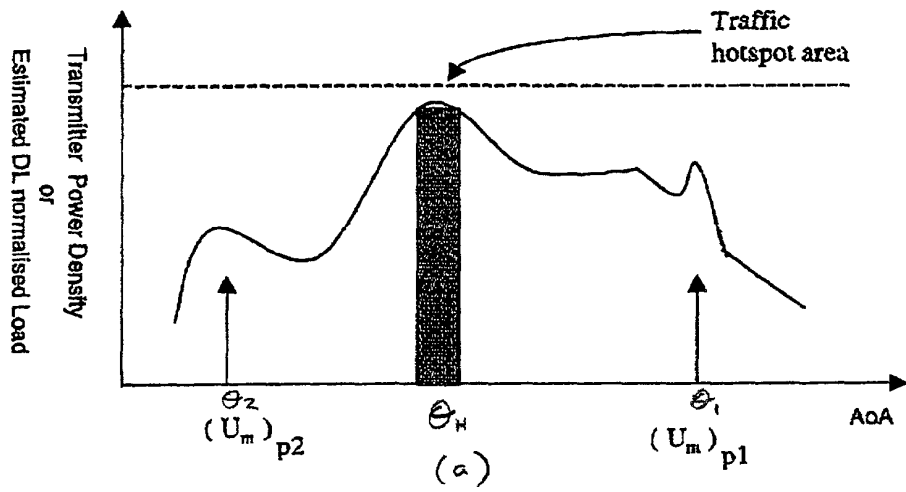IS THERE ANOTHER PATH AVAILABLE? 296
Y → DISABLE INTERFERING PATH 298
N

Figure 12

(a)

$(U_m)_{p1}$: High data rate user m, Path 1

$(U_m)_{p2}$: High data rate user m, Path 2

(b)

Fig. 13

(a)

(b)
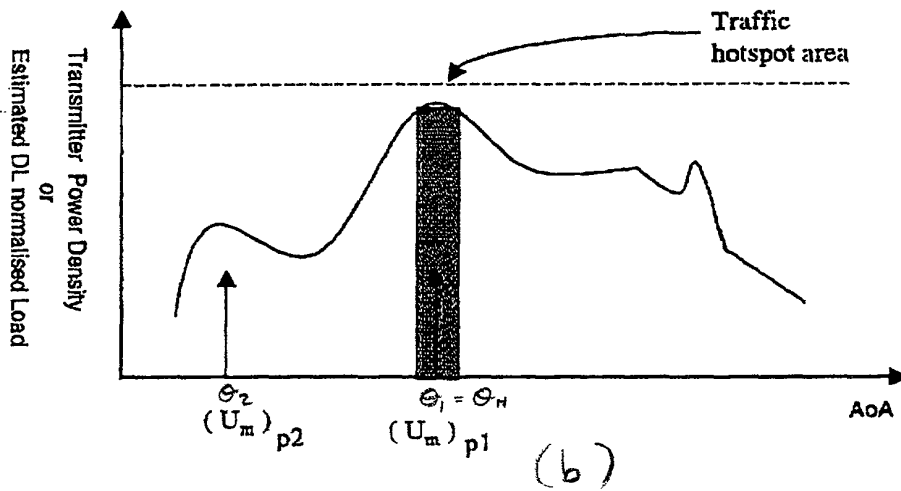
Figures 14

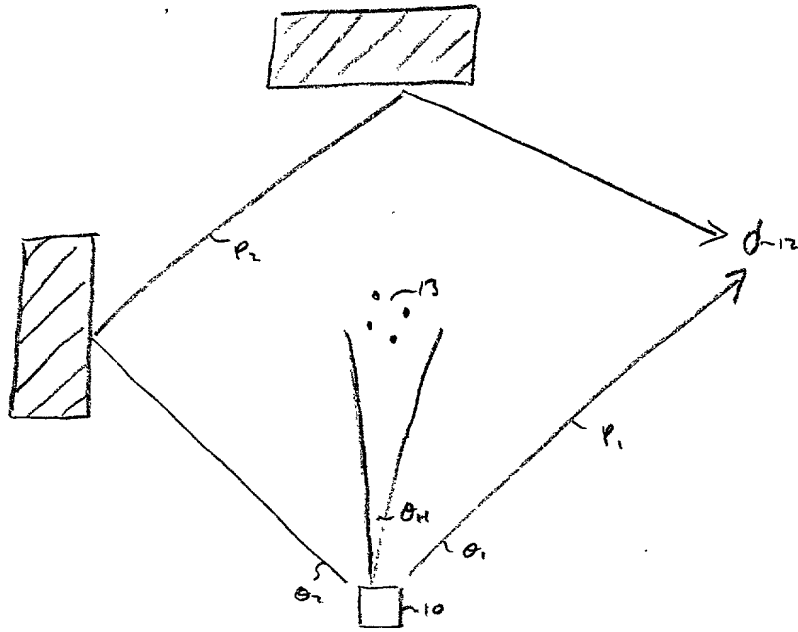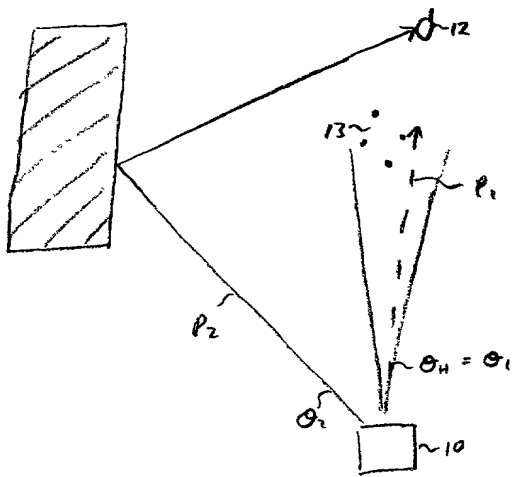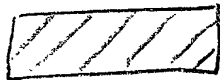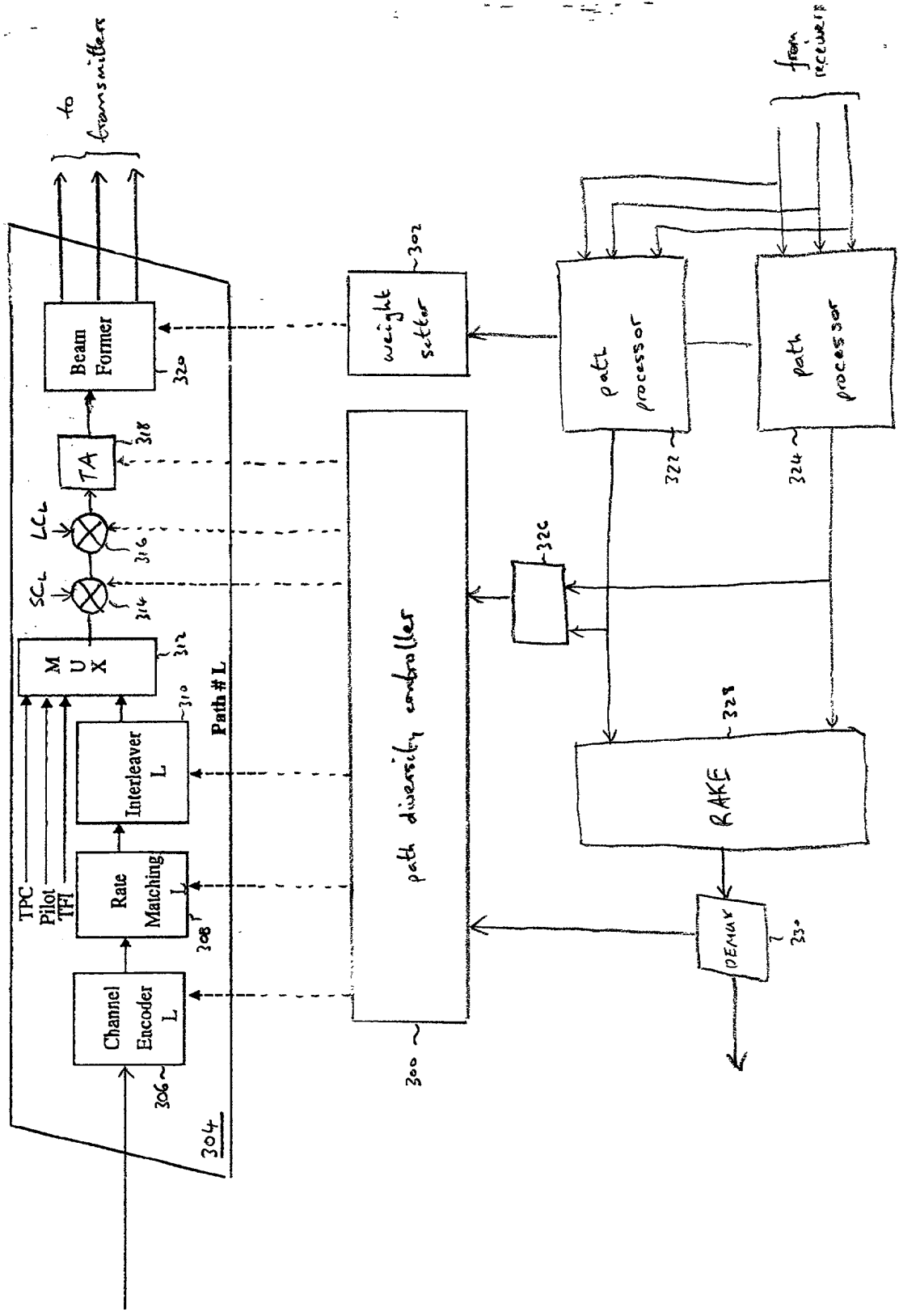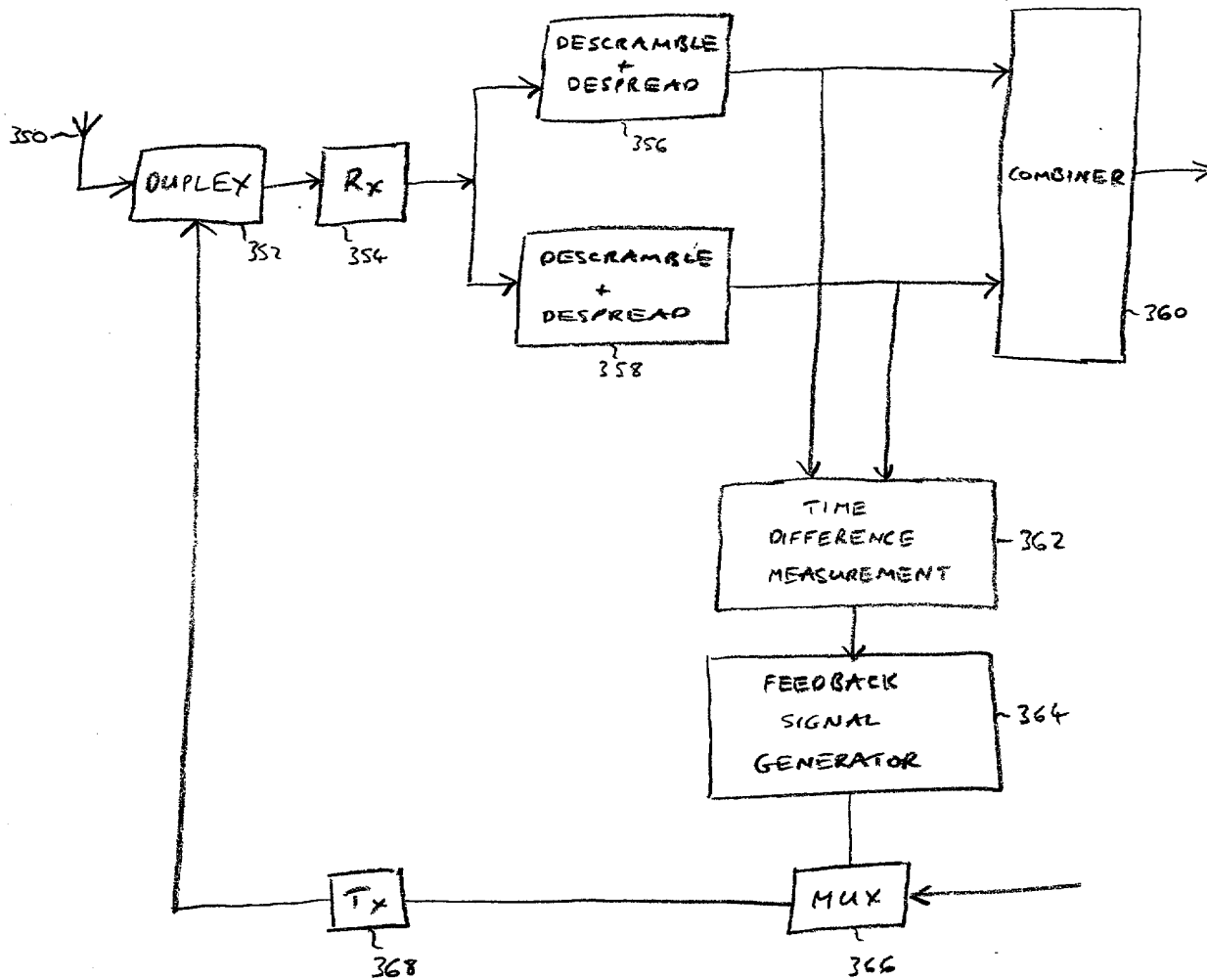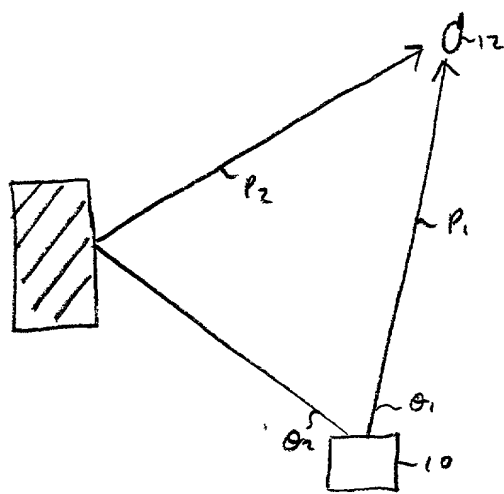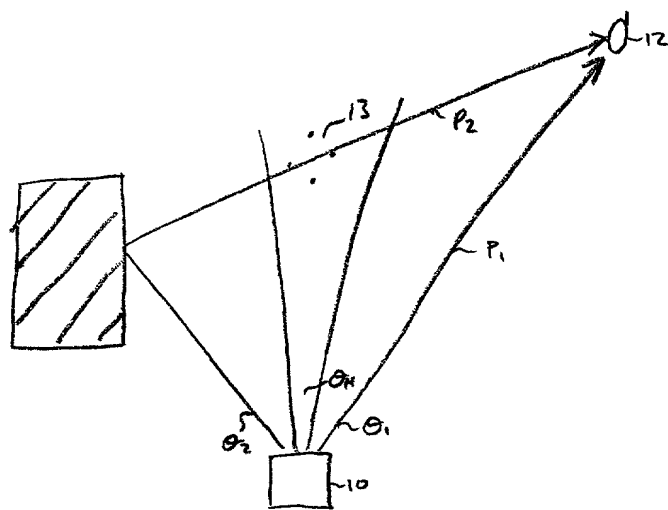Figure 15

Figure 16

(a)

(b)

Figures 17